144 /111 cont./
114 who conquered Mexico and Peru (1).

[113] 1. Guillermo Robertson. Historia de América desde el descubrimiento hasta antes de la Independencia /History of America from the Discovery to before Independence/. Travelers exaggerate their stories in order to attract more attention.

144 There are extensive areas where mixture of the two
[191] races was frequent, but it must be pointed out that in these
[142] areas the children of such have ceased to be Chiriguano, both because of the Spanish language, which they now speak perfectly, and the color, which is completely different; it is no longer parchment, as Father Corrado states, but a skin which is up to a certain point fine and velvetlike, so that for this class of persons who descend from white and Chiriguano the appropriate name is mestizo and not Chiriguano, and consequently the physical characteristics of the race have not changed. In these same areas families which have kept pure Chiriguano blood are not rare, and these families, or the individuals which make them up, have the same characteristics as other Chiriguano, without any noteworthy difference (2).

2. From the left bank of the Parapiti River northward this radical change is taking place, making the race disappear.

On the contrary, in the great Chiriguano centers, such as all the missions and a few other areas outside of them,
● 141 the physique of the native has not changed at all. As a
142 rule their stature does not reach one meter and 70 centimeters in men, and rare are the women who reach 1.60; the hair is black, glossy, and coarse, and very vigorous in

/111 cont./

141 142 both men and women, and fair hair indicates either an oddity or a clandestine affair. The forehead is rather small, as are also the languid, downcast eyes; the face is round, the nose flat, the mouth wide, the denture white as ivory, the chin short, and the lips rather thick. /112/ The 142 302 men do not wear beards, and anyone would believe that they are beardless, but the main reason why they do not have one is that they pull out the hairs as they grow, and for this they have some tin tweezers with which they make all the hair disappear, and they do well, because otherwise, in view of their slovenliness, with long beards they would really be orangutans (1).

[186] 1. The Toba call the Chiriguano tigre face because of his round face, and the latter gets back at them by calling them horse face because of their long faces. In the missions the neophytes wear mustache and goatee.

141 [291] They have a chest thrust forward, rather heavy shoulders and arms, normal-sized hands, and not very big feet, in spite of the fact that they grow as they will since they always go barefoot, especially the women, and not 147 all of them wear sandals /ojotas/. When they are enjoy- [853] ing good health, they are very robust, and the women without the slightest bother will nurse two babes at their [609] breasts. Whenever some white Christian woman is not able to nurse, she usually seeks out a Chiriguano woman to wet-nurse her child; this, in addition to being very advantageous because of the goodness of the blood, is also quite eco- 855 nomical. But it is true that most Indian women do not [609] wish to take care of children other than their own; most [466] of the time they agree to it with reluctance, or by force, this last occurring when the Indians are subject to a master.

[P. 190 is blank]

To me, the Chiriguano seemed to be of better physique than both the Puna and the Chaco Indians, and their cast of features, as a rule, to be less rough-hewn than those of the above-mentioned tribes. Herma ten Kate has taken anthropological measurements of four Chiriguano men, whose average height was determined at 160.1 cm.[1] Lehmann-Nitsche, who has made anthropological observations of 50 Chiriguano (40 men and 10 women), is my authority for the data I have grouped together in the subjoined table.[2]

The Chiriguano; some physical data.

Sex	Average height, cm	Shape of skull	Colour of skin, Luschan's scale	Colour of hair, Fischer's scale	Iris, by Martin's scale
Men.....	163.4	Dolichocephalic — mesocephalic	Majority 22	Majority 4	Majority 3—4
Women.....	151.7	Dolichocephalic — mesocephalic	Majority 18	Majority 4	Majority 3—4

The Chiriguano complexion is, accordingly, brown with a tint of yellow; the iris is dark brown, the hair black, coarse and lank. The growth of hair on face and body is very scanty.

The Chiriguano are not a nomadic people, but live in permanent villages, some of which are the abode of only a few families, whilst others contain several hundreds of inhabitants. At Ibitibi I was studying a Chiriguano village that, according to the Indians, was inhabited by about 300 people. This village was situated on a plain surrounded by wooded mountains (fig. 188). The huts formed a large circle, with the chief's hut in the centre. In the open space between the chief's hut and the rest, there were growing some close-foliaged trees (probably of the Bignoniaceæ family), affording much-needed shade. In earlier literature it is stated that the Chiriguano used to build a hut for strangers in the middle of the village plaza.[3] In many of the Chiriguano villages I visited, the huts were scattered about without any perceivable order.

The huts are rectangular and with ridged roofs. (Figs. 188—192.) The walls either consist of perpendicular sticks, of tree-branches or reeds,

[1] Ten Kate (1), p. 26.
[2] Lehmann-Nitsche (1).
[3] Nordenskiöld (12), p. 2.

/12 cont./

C Ce 144 [177] Chiriguano and Chané no longer exist. "The physiognomy of the latter was completely identical to that of the former" (45).

45. Moreno II, p. 254.

C 114 141 C [113] In addition to anthropological measurements made on four Chiriguano by Ten Kate (46), Robert Lehmann-Nitsche

46. Ten Kate. Herm.: "Matériaux pour servir à l'antropologie des indiens de la République Argentine /Materials for use for the anthropology of the Indians of the Argentine Republic/." Revista del Museo de la Plata. Vol. 12. La Plata. 1904.

in 1906 had the opportunity at the San Pedro de Jujui sugar mill to take the anthropological measurements of 40 Chiriguano men and ten women, who had come from Bolivia to work at that mill. Entitled "Estudios antropológicos sobre los Chiriguanos, /Pl. III-IV appear here/ /13/ Chorotes, Matacos, y Tobas (Chaco Occidental)" (47), Lehmann-Nitsche has

C [113] 47. Anales del Museo de La Plata, Vol. I, No. 2, (Second Series). Buenos Aires, 1908.

published the results of these measurements, together with measurements of other Indians, and added to that publication in the first 12 plates Chiriguano types photographed by Carlos Bruch. In addition to the somatic measurements, determination of skin color, eye color, and hair color and form have been published by Lehmann-Nitsche. Thirty-six of the 40 Chiriguano men stated where they had lived, and from this we know that these people had come from various regions of Chiriguano territory to the San Pedro sugar mill. There were some who had come from the northern regions, and one had come from the city of Santa Cruz de la Sierra. Others had come from the south of Chiriguano territory, for example, from the town of Carapati, located considerably to the south of the Pilcomayo River. There are named 13 Chiriguano

C 166 C [167]

[Text Continues on P. 30]

/13 cont./

166 towns from which one man had come from each one. From Charagua, Parapití, and Carapati two had come from each one, four from Ingre, five from Santa Rosa, and eight from Machareti. Unfortunately, the native soil of the Chiriguano women was not stated, and it is only said that they came from Bolivia.

141 The average height of the Chiriguano men measured by Lehmann-Nitsche is 163.4 cm., and the height of the Chiriguano women measured is 151.7 cm. This average height of the women measured is not a little less. The average height of the eight men from Machareti was only 161.8 cm., and that of the two men from Parapití only 158.1 cm. But the average height of the four men from Ingre was 169.15 cm. The tallest of the Chiriguano men measured, who had a height of 178.6 cm., had come from Ingre, and the shortest, with a height of 153.5 cm., from Machareti. The smallest woman (between 35 and 40 years old) was only 143.0 cm., and the tallest, 158.0 cm. These numbers show us that the height of different Chiriguano individuals is quite variable. Among the Chiriguano measured by Lehmann-Nitsche, the number of those who came from the same region is too small to be able to make exact deductions about the differences in height of the Chiriguano of the various regions in order to be able to clearly demonstrate the somatic influence of mixture with other tribes.

14 The photographs of Chiriguano types published by Lehmann-Nitsche show great variations among the different features and bodies, which corresponds to the fact that the present-day Chiriguano are the product of a mixture of various ethnic elements.

113 Good photographs of the Chiriguano of the southern part
114 of their territory can be found in the publication of von Rosen,
142 Ethnographical Research Work during the Swedish Chaco-Cordillera Expedition, 1901-1902 (48). Erland von Nordenskiöld

48. Stockholm. 1924.

Chané SF8
Izozo

Ce 411 126

/40 cont./

I. A. 747. (Izozó.) Length 0.97 m. Iron point; its length 24.5 cm. Cane shaft. Remnants of feathering.

I. A. 748. " Length 0.94 m. Iron point; its length 23.5 cm. Cane shaft. Without feathering. Fig. 37 f.)

I. A. 749. " Length 1.07 m. Iron point; its length 23.2 cm. Cane shaft. Without feathering.

I. A. 750. " Length 0.835 m. Iron point; its length 17 cm. Cane shaft. Without feathering. (Fig. 37h.)

I. A. 751. " Length 0.93 m. Iron point; its length 22.5 cm. Cane shaft. With feathering.

I. A. 752. " Length 0.92 m. Iron point; its length 27 cm. Cane shaft. With feathering.

I. A. 753. " Length 0.985 m. Iron point; its length 21.5 cm. Cane shaft. Perhaps with feathering.

C Ce 411 174 175

Of the seven Izozó bows, the first four on the list are good specimens made of hard wood and correspond in all details to the Chiriguano bows described by v. Rosen (187), except for

187. v. Rosen, op. cit., pp. 206, 208.

their length, which is a few centimeters less than these. This difference in length is easily explained by the fact these Chiriguano bows were collected by v. Rosen in 1901 and 1902. It would be difficult today to find still among the Chiriguano bows as long as those which v. Rosen acquired 35 years ago. From Lizarraga's statement that the Chiriguano bows were of the same height as the bowman, it is evident that the bows of these Indians were formerly [illegible] longer than those described by v. Rosen. If, following Lehmann-Nitsche's somatic measurements mentioned above, we set the average height of Chiriguano men at 1.63 m., there is still a difference of 18 cm. between this figure and that of 1.45 m., which is the length of the longest bow among those collected by v. Rosen. We must consider this shortening of the Chiriguano and Chané bow,

C [141]